Flexible sheets for waterproofing - Bitumen, plastic and rubber sheets for roof waterproofing - Determination of resistance to static loading

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NATIONAL FOREWORD

See Eesti standard EVS-EN 12730:2015 sisaldab Euroopa standardi EN 12730:2015 ingliskeelset teksti.	This Estonian standard EVS-EN 12730:2015 consists of the English text of the European standard EN 12730:2015.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 01.04.2015.	Date of Availability of the European standard is 01.04.2015.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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EUROPEAN STANDARD

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English Version

Flexible sheets for waterproofing - Bitumen, plastic and rubber sheets for roof waterproofing - Determination of resistance to static loading

Feuilles souples d'étanchéité - Feuilles d'étanchéité de toitures bitumineuses, plastiques et élastomères - Détermination de la résistance au poinçonnement statique

Abdichtungsbahnen - Bitumen-, Kunststoff- und Elastomerbahnen für Dachabdichtungen - Bestimmung des Widerstandes gegen statische Belastung

This European Standard was approved by CEN on 1 February 2015.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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COMITÉ EUROPÉEN DE NORMALISATION
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Foreword

This document (EN 12730:2015) has been prepared by Technical Committee CEN/TC 254 “Flexible sheets for waterproofing”, the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2015 and conflicting national standards shall be withdrawn at the latest by October 2015.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 12730:2001.

Compared to EN 12730:2001, in this new version of EN 12730 an additional Test Method C has been introduced in order to comply with extended experience gained in the use of plastic roofing sheets. Additionally a sample size reduction for Method B was introduced as well as an update specification of the soft support polystyrene (EPS) boards.

This European Standard is intended for characterisation and classification of bitumen, plastic and rubber sheets as manufactured or supplied before use. This test method relates exclusively to products or to their components where appropriate, and not to waterproofing membrane systems composed of such products and installed in the works.

This test is intended to be used in conjunction with product standards for bitumen, plastic and rubber sheets for roof waterproofing.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies a test for puncture by static loading for roofing membranes. Mechanical stress on membranes varies from static long-term loads to dynamic short-term loads. This method represents the static category of load where the stress is applied over a period of time.

This European Standard may also be applied for waterproofing.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 13163, *Thermal insulation products for buildings - Factory made expanded polystyrene (EPS) products - Specification*

EN 13416, *Flexible sheets for waterproofing - Bitumen, plastic and rubber sheets for roof waterproofing - Rules for sampling*

3 Terms and definitions

For the purposes of this document, the following term and definition applies.

3.1
surface
upper side of the sheet, as used in situ

Note 1 to entry The surface is usually the inside of the roll.

4 Principle

The principle of the test is to apply a concentrated load over a period of time, through a puncturing tool onto the surface of the membrane, when lying on a specified soft support (method A or method C) or hard support (method B). The choice of the appropriate test method for the different kind of membranes and the fields of applications shall be defined in the relevant product standards.

For the determination of resistance to static loading on soft support Method A is typically used for sheets that do not require protective measures when mechanical loads such as ladders, scaffoldings or other mounts are applied on them. Method C is intended for sheets which require the use of a protection layer in such construction situations.

5 Apparatus

5.1 General

The testing apparatus consists of parts indicated in 5.2 to 5.6 (see Figure 1).

5.2 Guide rail

The guide rail holds the loading rod in a vertical position. The vertical movement of the puncturing tool from the surface of the test specimen can be limited to (10 ± 2) mm by the guide rail.